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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

**MAILED** 

Application Number: 09/699,572 Filing Date: October 30, 2000 Appellant(s): GRIGORIEV, NIKOLAI

MAR 2 0 2007

**Technology Center 2100** 

Joseph Mehrle For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 12/01/06 appealing from the Office action mailed 01/05/06.

Art Unit: 2176

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 1-20, not claims 1-21 as recited on page 4 of the Brief.

# (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

# (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

# (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

# (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

# (8) Evidence Relied Upon

Application/Control Number: 09/699,572 Page 3

**Art Unit: 2176** 

5,883,635 Rao et a. 03-1999

6584476 B1 Chatterjee et al. 06-2003

## (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao et al., US 5,883,635, 3/16/99 (filed 11/15/96) in view of Chatterjee et al., US 6,584,476 B1, 6/24/03 (filed 4/22/00).

In reference to claim 1, Rao teaches producing a single-image view of a multiimage table using graphical representations of the table data. Rao teaches the following:

-Receiving a table having comprised of rows and columns. See column 1, lines 50-67. The intersection of the row and column is a cell. The information in the table reaching portions beyond a single cell because of the large amount of information. See column

Art Unit: 2176

2. The cells of the table arranged in a plurality of rows and columns which meets the limitation, "receiving a table having one or more cells wherein each cell spans one

or more columns and one or more rows". See column 7, lines 38-55.

Page 4

-Representing a table in an n-dimensional array data structure where the positional relationship of data arrange by rows and columns conveys information about the data which meets the limitation, "representing the table as a geometric grid wherein one or more positions within the grid house one or more of the cells." See column 5, lines 60-67 and column 6.

-Receiving an image display request from a user interaction device. The request including a request for an operation and information identifying the requested operation. The processor receiving the request configured to access the data store in memory and the instruction indicating instructions for the operating system. Displaying the table in a virtual screen or presentation space for a window. See columns 28-29. Compare to "providing a generic table represented by one or more formatting commands operable to provide a rendering of the grid to one or more output media'.

Rao does not state the use of "formatting commands to provide a rendering of the grid"; however, he does teach receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a "formatting command" as Rao teaches that the user can request certain actions to

indicate some sort of operation be performed on the data as would a formatting command. See columns 28-29.

Rao does not teach that each cell is assigned a "synchronization marker" or that the table is configurable; however, Chatteriee does. A user can choose to delete a row from a database table or modify the structure of the table which meets the limitation, "wherein the size of the generic table is configurable". See column 22, lines 47-50 and column 28, lines 64-67. Chatterjee teaches a version control system in which a database table comprising fields includes a synchronization value in record versions to indicate that two records are synchronized. See column 18, lines 36-51 and figure 2. Chatterjee's synchronization value indicates when the values in records are similar so that if a record is later modified, then two record versions are synchronized by determining whether the synchronization values in the field are the same which meets the limitation "wherein each cell is assigned a synchronization marker". Chatterjee further teaches allowing a user to make changes to the design and update the database with the changes. See column 2, lines 20-54. Chatterjee's version control subsystem determines when two record versions in two states are synchronized by determining whether the synchronization values in the field are the same. If the synchronization values are the same, then any modifications made to a record are associated with each record that is synchronized which meets the limitation, "when the grid is rendered to one or more output media each cell having a same synchronization marker are

processed together as an independent group". See column 21, lines 1-20.

Compare to

The newly claimed limitation "wherein the cells are processed in a sequential order defined by their corresponding synchronization marker to render the grid" is taught by Chatterjee in that cells with similar synchronization markers are processed together and in order of the "state hierarchy". See columns 13, lines 15-42 and column 14, lines 54-67 where Chatterjee discusses performing updates in a correct order in view of the tables.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to enhance Rao's system of producing a single-image view of a multi-image table using graphical representations of table data with Chatterjee's teaches of synchronization among different records because it would help facilitate associations with different records in the database, allow conflicts between records to be resolved while providing an efficient means to unify records or cells with similar data. See abstract of Chatterjee.

In reference to claim 2, Rao teaches representing a table in an n-dimensional array data structure where the positional relationship of data arrange by rows and columns conveys information about the data. See column 5, lines 60-67 and column 6.

Art Unit: 2176

In reference to claim 3, Rao teaches displaying the table in a virtual screen or presentation space for a window or to the area for printing or facsimile transmission.

See columns 28-29.

In reference to claims 5, Rao teaches representing the table in an n-dimensional array data structure which could be a rectangle or two-dimensional array.

In reference to claims 6, Rao teaches representing the table in an ndimensional array data structure which could be a rectangle or two-dimensional array

In reference to claim 7, Rao does not state the use of "formatting commands to provide a rendering of the grid"; however, he does teach receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed.

In reference to claim 8, Rao teaches producing a single-image view of a multiimage table using graphical representations of the table data. Rao teaches the following:

-Receiving a table having comprised of rows and columns. See column 1, lines 50-67. The intersection of the row and column is a cell. The information in the table reaching portions beyond a single cell because of the large amount of information. See column

Art Unit: 2176

2. The cells of the table arranged in a plurality of rows and columns. See column 7, lines 38-55. Compare to "decoupling one or more cells from a table" and "expressing a dimension associated with each cell in terms of each cell's relative position to each other within the matrix".

-Representing a table in an n-dimensional array data structure where the positional relationship of data arrange by rows and columns conveys information about the data.

See column 5, lines 60-67 and column 6. An n-dimensional array is a matrix. Compare to "storing the cells in a matrix."

-Receiving an image display request from a user interaction device. The request including a request for an operation and information identifying the requested operation. The processor receiving the request configured to access the data store in memory and the instruction indicating instructions for the operating system. Displaying the table in a virtual screen or presentation space for a window. See columns 28-29. Compare to "outputting one ore more formatting commands operable to produce a rendition of the table on a output media from the matrix".

Rao does not state the use of "formatting commands to provide a rendering of the grid"; however, he does teach receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a "formatting command" as Rao teaches that the user can request certain actions to

Art Unit: 2176

indicate some sort of operation be performed on the data as would a formatting command. See columns 28-29.

Rao does not teach that each cell is assigned a "synchronization marker" or that the table is configurable; however, Chatterjee does. A user can choose to delete a row from a database table or modify the structure of the table. See column 22, lines 47-50 and column 28, lines 64-67. Chatterjee teaches a version control system in which a database table comprising fields includes a synchronization value in record versions to indicate that two records are synchronized. See column 18, lines 36-51 and figure 2. Chatterjee's synchronization value indicates when the values in records are similar so that if a record is later modified, then two record versions are synchronized by determining whether the synchronization values in the field are the same. Compare to "associating a synchronization marker with each cell". Chatterjee further teaches allowing a user to make changes to the design and update the database with the changes. See column 2, lines 20-54. Chatterjee's version control subsystem determines when two record versions in two states are synchronized by determining whether the synchronization values in the field are the same. If the synchronization values are the same, then any modifications made to a record are associated with each record that is synchronized. See column 21, lines 1-20. Compare to "wherein each of the one or more formatting commands are processed to render the rendition against a same group of cells that have a same synchronization marker". It would have been obvious to a person of ordinary skill in the art at the time of the invention to enhance Rao's system of producing a single-image view of a multi-image table using

graphical representations of table data with Chatterjee's teaches of synchronization among different records because it would help facilitate associations with different records in the database, allow conflicts between records to be resolved while providing an efficient means to unify records or cells with similar data. See abstract of Chatterjee.

In reference to claims 9-10 and 14, Rao teaches receiving an image display request from a user interaction device. The request including a request for an operation and information identifying the requested operation. The processor receiving the request configured to access the data store in memory and the instruction indicating instructions for the operating system. Displaying the table in a virtual screen or presentation space for a window. See columns 28-29. Rao further teaches does teach receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed (i.e. processing vertically, in parallel).

In reference to claim 11, Rao teaches representing a table in an n-dimensional array data structure where the positional relationship of data arrange by rows and columns conveys information about the data. See column 5, lines 60-67 and column 6.

In reference to claims 12-13, Rao teaches receiving an image display request from a user interaction device. The request including a request for an operation and information identifying the requested operation. The processor receiving the request

configured to access the data store in memory and the instruction indicating instructions for the operating system. Displaying the table in a virtual screen or presentation space for a window. See columns 28-29. Rao further teaches does teach receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed, such as configuring the output or adjusting dimensions.

In reference to claim 15, Rao teaches producing a single-image view of a multiimage table using graphical representations of the table data. Rao teaches the following:

- -Receiving a table having comprised of rows and columns. See column 1, lines 50-67. The intersection of the row and column is a cell. The information in the table reaching portions beyond a single cell because of the large amount of information. See column 2. The cells of the table arranged in a plurality of rows and columns. See column 7, lines 38-55.
- -Representing a table in an n-dimensional array data structure where the positional relationship of data arrange by rows and columns conveys information about the data. . See column 5, lines 60-67 and column 6. Compare to "representing one or more cells of a table"
- -Receiving an image display request from a user interaction device. The request including a request for an operation and information identifying the requested operation.

  The processor receiving the request configured to access the data store in memory and

the instruction indicating instructions for the operating system. Displaying the table in a virtual screen or presentation space for a window. See columns 28-29. Compare to "... with one or more executable commands wherein each command has one or more parameters defining an outputted cell's dimensions on an output media"

Rao teaches that the request including a request for an operation and information identifying the requested operation. The processor receiving the request configured to access the data store in memory and the instruction indicating instructions for the operating system. Displaying the table in a virtual screen or presentation space for a window. See columns 28-29. Rao does not state the use of "formatting commands to provide a rendering of the grid"; however, he does teach receiving an image display request in which the user request can comprise of any number of actions the user. considers necessary for indicating a valid request and causing an operation to be performed. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a "formatting command" as Rao teaches that the user can request certain actions to indicate some sort of operation be performed on the data as would a formatting command. See columns 28-29.

Rao does not teach that each cell is assigned a "synchronization marker" or that the table is configurable; however, Chatterjee does. A user can choose to delete a row from a database table or modify the structure of the table. See column 22, lines 47-50 and column 28, lines 64-67. Chatterjee teaches a version control system in which a database table comprising fields includes a synchronization value in record versions to indicate that two records are synchronized. See column 18, lines 36-51 and figure 2.

Chatterjee's synchronization value indicates when the values in records are similar so that if a record is later modified, then two record versions are synchronized by determining whether the synchronization values in the field are the same. Compare to "associating with each cell a synchronization marker". Chatterjee further teaches allowing a user to make changes to the design and update the database with the changes. See column 2, lines 20-54. Chatterjee's version control subsystem determines when two record versions in two states are synchronized by determining whether the synchronization values in the field are the same. If the synchronization values are the same, then any modifications made to a record are associated with each record that is synchronized. See column 21, lines 1-20. Rao teaches receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed (i.e. processing vertically, in parallel). Compare to "executing commands in parallel to produce a rendition of the table on the output media, and wherein each command processed in parallel to produce the rendition processes against cells in a same group associated with a same synchronization marker". It would have been obvious to a person of ordinary skill in the art at the time of the invention to enhance Rao's system of producing a single-image view of a multi-image table using graphical representations of table data with Chatterjee's teaches of synchronization among different records because it would help facilitate associations with different records in the database, allow conflicts between records to be resolved

Art Unit: 2176

while providing an efficient means to unify records or cells with similar data. See abstract of Chatterjee.

In reference to claims 4 and 18, Rao does not teach that the table or first format is in XSL. However, XSL data can comprise a table, thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have the table be in a XSL format as XSL was a well-known format for representing style and content of data at the time of the invention.

Claims 16-17 and 19 are rejected under the same rationale used in claims 7, 2, and 3 respectively above.

In reference to claim 20, Rao teaches representing a table in an n-dimensional array data structure where the positional relationship of data arrange by rows and columns conveys information about the data. See column 5, lines 60-67 and column 6. Thus the data structure has different dimensions than the table.

#### (10) Response to Argument

On page 11 of the Brief, Appellant argues that the combination of Rao and Chatterjee is not permissible. Applicant argues that Rao is focused on producing a rendering of primary data while Chatterjee is focused on producing the primary data

Art Unit: 2176

from which Rao may use. Examiner notes that Appellant's statement reciting, "Chatterjee is focused on producing the primary data from which Rao may use" is an admission that the two references are combinable. Appellant argues that there is no motivation within Rao or Chatterjee to suggest that using a technique to assemble primary data should be used to alter the rendering. However, as stated by Appellant, the primary data of Chatterjee could be used by the rendering technique of Rao. Examiner further maintains that the two references are combinable because Rao renders the "primary data" from a database. If data in the database changes, then the rendering of view of the document containing that data is also altered.

Appellant also states on pages 11-12 of the Brief, "The two (references) are complimentary only in that Chatterjee's output can be consumed as input by Rao but the two are not complimentary in their processing techniques at all." Examiner does not agree that the two references cannot be combined. Furthermore, it is noted that the Appellant refers to "processing techniques" but it is not clear what "processing techniques" the Appellant is referring to as not being "combinable".

Appellant argues on page 12 of the Brief that the proposed combination lacks a teaching of "synchronization markers". Specifically, Appellant argues the teaching in Chatterjee of synchronization for use with a metadata field or database record is not associated with a "cell" or a table that is rendered, but rather is associated with a record for version control. Examiner disagrees that the proposed combination lacks a teaching of synchronization marker.

Chatterjee teaches a version control system in which a database table comprising fields includes a synchronization value in record versions to indicate that two records are synchronized. See column 18, lines 36-51 and figure 2. Chatterjee's synchronization value indicates when the values in records are similar so that if a record is later modified, then two record versions are synchronized by determining whether the synchronization values in the field are the same which meets the limitation "wherein each cell is assigned a synchronization marker". Chatterjee further teaches allowing a user to make changes to the design and update the database with the changes. See column 2, lines 20-54. Chatterjee's version control subsystem determines when two record versions in two states are synchronized by determining whether the synchronization values in the field are the same. If the synchronization values are the same, then any modifications made to a record are associated with each record that is synchronized which meets the limitation, "when the grid is rendered to one or more output media each cell having a same synchronization marker are processed together as an independent group". See column 21, lines 1-20. The limitation "wherein the cells are processed in a sequential order defined by their corresponding synchronization marker to render the grid" is taught by Chatterjee in that cells with similar synchronization markers are processed together and in order of the "state hierarchy". See columns 13, lines 15-42 and column 14, lines 54-67 where Chatterjee discusses performing updates in a correct order in view of the tables.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to enhance Rao's system of producing a single-image view of a multiApplication/Control Number: 09/699,572 Page 17

Art Unit: 2176

image table using graphical representations of table data with Chatterjee's teaches of synchronization among different records because it would help facilitate associations with different records in the database, allow conflicts between records to be resolved while providing an efficient means to unify records or cells with similar data. See abstract of Chatterjee.

To summarize, the synchronization marker of Chatterjee allows different records in the database to be processed together in order to "synchronize" changes made to one record to transfer to other related records which appears to be the purpose of the synchronization markers according to Appellant's specification on pages 14-15.

Applicant argues that a record has multiple cells and the synchronization field is not associated on a cell level. Examiner disagrees because a record could be on a cell level if it comprises only one field (i.e. one cell). If a record can be synchronized, then a cell can as well.

Therefore, the rejection is maintained in view of the comments above.

#### (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Rachna Singh

Conferees:

Heather Herndon

Supervisor, Art Unit 2176

Stephen Hong

Supervisor, Art Unit 2178